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ABSTRACT

Students with learning disabilities typically experience more stress than other students at school, as a result of peer rejection, academic difficulties, and changing classroom environments, but may have fewer resources and abilities to cope with this stress. This paper outlines the knowledge and skills that teachers need to help alleviate stress in their students. The goal of the instructional intervention approach is to help students develop techniques and skills to manage stress on their own. Instructional approaches to stress management include: using relaxation techniques and visualization, utilizing positive self talk to minimize the power of stressors, recognizing when negative self talk serves to maximize the stress of an experience, developing problem solving and decision-making strategies to use when confronted with stressors, and developing and utilizing social supports. (22 references) (JDD)

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Achieving the Maximum Benefit: Managing Stress in Learning Disabled Students

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Abstract

Students with learning disabilities typcially experience more stress at school (as a result of peer rejection, academic difficulties and changing classrooom environments), but may have fewer resources and abilities to cope with this stress. This paper outlines the knowledge and skills that teachers need to help alleviate stress in their students. A variety of instructional approaches to stress management are covered. These include relaxation, visualization, positive self talk, problem solving, developing and utilizing social supports.

With the decrease of public and professional support for separate service delivery programs for students with special needs, more and more learning disabled students are being placed within regular education programs. Increased expectations coupled with fewer supports provided for these students within mainstreaming programs, are exposing these students to greater stress. In order for students with learning disabilities to have success in regular education programs, their teachers need to develop the knowledge and skills to help alleviate stress in their students. Unfortunately, this area of programming for learning disabled students has not enjoyed much attention.

Not only do learning disabled students typically experience more stress at school (as a result of peer rejection, academic difficulties and changing classroom environments), but students with learning disabilities may also have fewer resources and abilities to cope with this stress. As a result, the stress experienced by learning disabled students is compounded and exacerbated by their learning disability.

What we sometimes view as lack of social skills and inappropriate strategies may in fact be reactions to stress. These reactions to stressors often create problems in the classroom. These students may be distracted or preoccupied with stressors and may find it difficult to concentrate on academic tasks. As a consequence, their behavior may disrupt ongoing classroom activities, impeding not only their ability to learn, but their teachers' ability to teach. Intervention in the area of stress may broaden learning disabled students' capacity to cope as well as enhance teachers' ability to teach.

Instructional approaches to stress management entail teaching coping strategies to students and helping them develop their social support networks. These strategies include 1) using relaxation techniques, 2) utilizing positive self talk to minimize the power of stressors, 3) recognizing when negative self talk serves to maximize the stress of an experience, 4) developing problem solving and decision making strategies to use when confronted with stressors, and 5) recruiting and soliciting the aid of social networks for support in handling stressors. These strategies will help students to develop more positive

approaches to stress management and they will assist students in maintaining their self control in stressful situations. The instructional approaches are the major focus of this paper.

The goals of instructional intervention approaches are to help students develop techniques and skills to manage stress on their own. These goals include learning and applying their own system of crisis management, improving the ability to take control while remaining in control, building problem solving skills, and expanding social support networks.

Developing Awareness

Developing background knowledge and concepts about stress are the important first step in teaching students about stress. During this portion of instruction, students gain general information about stress, stressors, resources, and reactions to stress. Awareness activities are designed to help students begin to identify personal information about the kinds of events and situations which they find stressful, how they typically respond to stress, and how they typically cope with stress. Students also develop an

understanding of how personal and environmental resources can be used to moderate their stress reactions.

Once students are able to pinpoint the kinds of events and situations that they typically consider stressful and the typical ways that they respond to stress, they are ready to learn ways of managing their stress. The four basic interventions to help students manage stress are relaxation, cognitive monitoring, problem solving and decision making,and developing and using social networks for support.

Relaxation

Relaxation techniques are stress management techniques that students may use to cope with stress and to moderate their reactions to stress. They are designed to reduce tension and to foster inner calm, and can be used to prevent tension, anxiety and threat, or can be used to counteract such feelings.

Relaxation strategies have been used effectively with moderately mentally retarded students (Harvey, 1979), severely retarded students (Cautela & Groden, 1978) learning disabled students (Amerikaner & Summerlin, 1982; Margolis & Pica, 1987), and hyperactive students (Omizo & Michael,

1982; Raymer & Poppen, 1985; Denkowski & Denkowski, 1984).

Relaxation training has been used effectively to help special needs students improve self control (Cautela & Groden; 1978), attention to task (Omizo & Michael; 1982), hyperactive behavior (Braud, Lupin, & Braud, 1975; Raymer & Poppen, 1985; Dunn and Howell, 1982) reading achievement (Margolis, & Pica, 1987), spelling (Olrich, 1983; Zenker, 1984), and acting out and distractibility (Omizo, Omizo, & Suzuki, 1987). However, relaxation programs by themselves (i.e. as an isolated treatment) have not been effective in remediating academic deficits or behavioral disorders.

There are a variety of relaxation techniques which can be taught to children. These are listed and described in Table One. Different relaxation techniques require varied amounts of practice to learn and varied amounts of time to perform. Different relaxation techniques appear to have differential effects and some techniques work better for some individuals than for others (Smith, 1985). Some of the techniques require longer periods of time to learn and to practice than others; some are more active while others require little motor movement. Some techniques use creativity and imagination while others are very structured.

Students may be introduced to a variety of relaxation technqiues and then be allowed to explore and decide for themselves which techniques provide them with better results. Use of a biofeedback devise, such as the biodot or the finger thermometer, may help students to determine which relaxation method works best for them.

Because some students may experience mild unwanted physical symptoms during some types of relaxation exercises, permission for participation should be gained for each student before beginning the relaxation program. The symptoms that students experience are rare and usually very mild. These may be feelings of dizziness, mild anxiety or muscle aches. On the rare occasion that students experience these symptoms during a relaxation exercise, they should be directed to skip the exercise. Prescribed medications may hinder the effects of relaxation for some students. Students with physical handicaps may have difficulty performing some of the exercises. These are also concerns that should be clarified before beginning relaxation lessons.

Choosing the setting is an important aspect of teaching relaxation techniques to your students. It appears to help

to have the setting quiet and free from interruptions and distractions. Placing a sign on the classroom door asking visitors to come back at an allotted time is usually an effective way to keep the classroom free from interruptions. Students should be seated comfortably within the room. Standard classroom chairs are appropriate for students, as long as students are able to sit with their feet on the floor. Some activities will suggest that students lie on the floor during the training.

Most relaxation exercises incorporate some type of deep breathing as a part of the exercise. Breathing often reflects our tension and relaxation. Consider the different ways we breathe when we are angry, or afraid, or shocked, or in despair. Consider our sigh of relief and the slow, even breathing when we are relaxed. Our quick, choppy breathing reflects our anger; our gasp that we are shocked. Since we have control over our breathing, we can use breathing to restore a relaxed physical state to our bodies.

Deep breathing techniques use diaphragmatic breathing. Deep breathing involves breathing which is slow and even. Breath intake is slow and deep. There is a pause between inhaling and exhaling. Concentration is focussed on using

the diaphragm until diaphragmatic breathing becomes automatic. The pace of breathing is slow and rhythmic.

Progressive Muscle Relaxation

Progressive muscle relaxation (PMR) was developed by Edmund Jacobson in 1934 as a physiological method of combating tension and anxiety (Bernstein & Borkovec, (1973). It is a relaxation technique which utilizes the tensing and relaxing of various muscle groups in order to create a relaxed feeling and to counteract stress. It is designed to help students learn to recognize when muscles are tense and how to relax them. Students learn relaxation by deliberately tensing different muscles. This helps students to learn to recognize when muscles are tight and tense and how to relax them.

There are four basic stages of PMR. These are 1) tensing the muscles as much as possible; 2) feeling and noticing the tenseness in the muscles; 3) relaxing the muscles and; 4) enjoying the pleasant, relaxed feelings. Students are directed to tense one muscle at a time, while keeping all other muscles relaxed. Some students may need much practice with this aspect of PMR. Students will vary

in their ability to be successful in tensing various muscles. Sometimes students report muscle cramping, particularly in the calves and feet (Berstein & Borkovec, (1973). Anytime muscle cramping occurs, students should be directed to generate less tension in these areas. If cramping in the same area reoccurs, this muscle should be eliminated from the PMR procedure.

Visualization / Imagery

Visualization or imagery is a relaxation technique that consists of creating peaceful images in the mind. These images may be of real or imagined events or scenes with which students are familiar. It is usually most useful to select themes from students' natural fantasies. Themes should be geared to the developmental level of students. Students as young as six are able to use complex and novel images to change their behavior (Rosenstiel & Scott, 1977).

There are generally two types of images used in visualization. One involves sensations, such as visual, auditory, tactile images, while the other involves deepening suggestions, such as "floating away", "falling softly".

Deepening suggestions enhance the relaxation experience. Some examples of deepening suggestions include sinking deeper, becoming more still, letting go, and becoming lighter (Smith, 1985).

Visualization or imagery has also been used as a technique for practicing and rehearsing material to be learned (spelling words, Olrich, 1983) and to aid mastery of new skills (Olney & Olney, 1985). Mastery imagery can be used as a way of pushing negative thoughts from one's mind and filling the space left with positive images of seeing oneself as succeeding, winning or getting what is wanted (Olney & Olney, 1985). Mastery imagery is a way of creating solid and realistic pictures of situations and enables one to use a trial-and-error approach to challenges without the risk of loss.

Mastery imagery is like visualization in that it uses images to create a relaxed state of mind. However imaging is more purposeful in that it can be used as a way to "thinking your way to success" (Olney & Olney, 1985). It can be used to 1) solve intellectual problems; 2) prepare for difficult situations; 3) test decisions and choices; 4) work out frustrations; 5) fulfill ambitions; 6) practice

skills; 7) solve problems indirectly; 8) remember past experiences; 9) improve health.

Meditation

Meditation is a form of contemplation and is a relaxation technique which can be taught to students. Meditation involves three skills. These are attaining physical calm, focused attention and letting be (Smith, 1986). Physical tension, distraction and overcontrol are the opposites of meditation. When practicing meditation you need to relax your body and attain a physical calmness. Attention is focussed on one image, one word or one sound. Letting be allows you to give up unnecessary control and thinking activities. A meditative state is one which encompasses a physical calmness with focussed attention and a spontaneous and flexible control.

Meditation should begin with a series of warm-up exercises to set the stage for the meditation exercise. Warm-up exercises may be deep breathing exercises, progressive muscles relaxation exercises or stretching exercises. This is followed by meditation which consists of attending to one stimulus, returned attention to this

stimulus after every distraction and repeating this for five to ten minutes. The stimulus may be a relaxing word, a visual image, or a simple movement (Smith, 1986).

Biofeedback

Biofeedback uses equipment to monitor the relaxation response. With the feedback from the equipment, students are able to judge the effectiveness of each relaxation technique. Most biofeedback equipment is costly and difficult to attain. However the finger thermometer costs about $.70 each and is used to measure finger temperature. It is based on the notion that temperature raises as one becomes more relaxed. Increased bloodflow to the extremities induced during relaxation causes increased finger temperature. The biodot is a small dot about one centimeter in diameter that an costs about $.06 each. It has an adhesive backing, is placed on the skin and measures skin temperature. Instead of reading a specific temperature, the biodot changes color in response to skin temperature changes.

Evaluating the Relaxation Response

How will teachers know if your students are benefitting from learning relaxation techniques? By examinining the physical responses of students, teachers are often able to

determine the effects of the relaxation exercises. By looking at body posture, muscle tone and respiratory patterns of your students, teachers are able to ascertain how students are responding to relaxation training. Another way to evaluate relaxation technique is to have students report and evaluate how they feel before and after relaxing. First students are asked to make a global rating of how they felt before relaxing. Then students practice one of the relaxation techniques. This is followed by having students evaluate how they feel now. Some form of relaxation evaluation should be used after each training or practice exercise. This evaluation promotes self and body awareness which are important in helping students to recognize feelings of calm and relaxation, and tension and stress when they occur in day-to-day activities.

Cognitive Approaches to Stress Management

Positive and Negative Self Talk

When we recognize that we are experiencing feelings of stress, we can use relaxation strategies and techniques to adjust our level of arousal. Often times these techniques can be very successful in reducing the level of felt stress. When used on a consistent and regular basis, relaxation techniques have been effective in preventing stress symptoms and alleviating illness (Smith, 1985). However, at other

times, different approaches to handling stress are needed to counteract feelings of stress.

Positive and negative self talk specifically deal with how our perceptions of events mediate or influence our stress reactions. Stress is defined by events and by our reactions to events. An event is stressful only if we perceive it as such. There are two types of appraisals of events, a primary appraisal and a secondary appraisal. In the primary appraisal we ask, "Is this a stressor" and in the secondary appraisal we ask, "Can I cope with this stressor?" (Kobassa, 1983).

Our self statements, what we say to ourselves, influence our perceptions of events, situations and people (Meichenbaum, 1978). When we examine behavior, we must examine both the behavior exhibited (the stress reaction) and also the related cognitions (self statements, attributions, images). Stress Innoculation Training (SIT) (Meichenbaum, 1978) directs students to develop positive self statements to use when preparing, confronting, and coping with stress and positive self statements to use which focus on positive self reinforcement. In SIT students learn to 1) look at the stressful situation realistically, 2) control negative thoughts and statements, 3) prepare for the stressor, 4) confront the stressor, 5) cope with the reaction of the stressor and 6) self reinforce. Through

modeling, coaching and generalization training, students are able to learn how to manage stressful events and situations.

Another way of examining how our thoughts may act as stressors is to understand cognitive errors. Cognitive errors are types of negative self talk or distorted thinking which can exacerbate our stress reactions. When we make cognitive errors our reactions to stress may be increased. By learning about cognitive errors we may be better able to identify the types of errors we characteristically make and then use this knowledge to refocus irrational, distorted thoughts to more rational thoughts. The major types of cognitive errors include absolute thinking, catastrophic thinking, dichotomy thinking, overgeneralization, and personalization. By classifying irrational thoughts and rethinking them, students can be helped to decrease their negative self statements and thus, decrease their stress.

Positive Self Talk and Imagery

Imagery and positive self talk can be combined to enhance student performance and decrease student level of stress. As a cognitive approach to stress management, positive self talk and imagery involve imagining a stressful event, visualizing the events in a positive manner, while rehearsing the kinds of self talk and vocalizations that will be used when confronting the stressor. Positive self

talk and imagery used in this manner has been successful in helping students in all academic areas, in content area instruction, in social skills and test preparation (Applegate & Hamm, 1985).

To practice these techniques, students use self talk to guide their way through a difficult task. Students may use imagery to prepare or confront the stressor. In this case students carefully visualize the stressful event or situation. Students use positive self statements during the imagery to decrease their level of stress. As when using imagery, students are guided to experience more and more details of the situation as they visualizes it. Students may visualize themselves successfully performing a task which ordinarily causes them some difficulty. Students areguided into visualizing the event in the most positive and successful manner possible. The self statements made by students focus them on all of the details of the task.

Developing Problem Solving and Decision Making Strategies

Problem solving and decision making strategies are coping strategies which can be learned and used to help decrease feelings of stress. Steps to problem solving include 1) recognition of the problem, definition of the problem, generation of possible solutions to the problem,

considering consequences of solutions, decision making, problem implementation, and evaluation.

Verbal mediation should be embodied in the problem solving process (Meichenbaum & Asarnow, 1979). Students should learn to verbally mediate each part of the problem solving process as they progress through it. The use of internal dialog facilitates students' ability to cope with stress. The internal dialog includes self statements such as, "what should I do", "what are the important details to look at", "stop and think", "what should I do first, second, next", "that's okay, try again", and "you did a good job", and will enhance the coping and problem solving process. Self statements will help students organize information and help them to generate solutions. It will aid in the evaluation of the process and enhance a positive approach to the process.

Social Networks and Social Supports

Sometimes students will be unable to solve problems by themselves and will need the support of members of their social network to manage stressful situations. Developing social networks and utilizing social supports are important stress management techniques for students to learn. Social networks are defined as all the people we see regularly, and with whom we feel close, and have developed some type of

functional relationship. Social supports are defined as the kinds of resources that are provided by members of our social networks. By giving students the tools of relaxation, positive self talk, and problem solving and decision making, we hope that students will become more self-reliant in their ability to control stress. However, another tool that we can give to students to help them manage their stress, is to help them learn ways to develop and use social or helping supports.

There are four types of support that may be helpful in moderating stress. These are 1) emotional support; 2) instrumental support; 3) informational support and 4) appraisal support. Emotional support involves using feelings and empathy to provide support. Instrumental supports are supports that help to remove obstacles and providing needed resources. Informational support entails giving information to solve problems, or clarifying situations by adding information and appraisal support involves reinterpreting self-evaluations and providing an "outside" view of the situation.

The first step in teaching students about social networks and social supports is to help students identify the people within their social networks. Family, peers, teachers, neighbors, professional supports, special interest group members, pets and child caretakers are among the major

groups from which a student may draw support. Students should develop an awareness of all the people within their social networks and how their networks may vary from school to the neighborhood to the home.

Once students have identified their social networks, they should begin to explore the kinds of support they receive from various members of their social networks. It is helpful for students to list members of their social networks and begin to examine the types of supports they receive from each member. This can be followed by having the students evaluate the effectiveness of the supports they receive.

Students should then begin to define those times that using social supports would be helpful to them in managing their level of stress. They should begin to differentiate situations in which getting help would be beneficial to them, and should also consider who, within their social network would be best to help them handle specific stressors. Once students have identified typical scenarios where they should get help and have determined to whom they should ask for help, they may need to practice the social skills involved in eliciting help from others.

There are a number of social skills involved in using social supports. students must find the right person, seek

the person out, gain their attention at the appropriate time and in the appropriate way, clearly state their problem, listen to the helper's advice, ask for clarification if they don't understand,and finally, thank the person for helping. Students with poor social skills may need modeling, coaching and role playing practice in order to learn these skills in using social supports.

When students with learning disabilities learn adaptive coping strategies, such as those mentioned above, to manage their stress, they will become more successful in their school programs. Adaptive coping methods include using relaxation to maintain self control, monitoring self talk, evaluating options before acting, considering the consequences of his/her actions, arriving at creative solutions to problems, and eliciting the aid of a teacher or another adult. When students choose an adaptive method of coping with stress, they are able to alleviate the uncomfortable physical and emotional stress feelings while enhancing their functioning in the school setting. Every time students cope with stress in an adaptive manner, they are building a repertoire of coping skills on which to draw the next time they are stressed. As students accumulate a variety of coping strategies, they improve the ability to handle future stressors. In order to better ensure that learning disabled students are successful in regular

education programs, their teachers need to develop the knowledge and skills to help alleviate stress in their students.

Table 1

Relaxation Techniques

	Description of Activity	Practice Required	Time to perform	Level of Activity	Language Required	Level of Creativity
Deep Breathing	Diaphragmatic breathing exercises	easy to learn	5 min.	very low	slight language required	none
Progressive Muscle Relaxation	Systematic tensing and relaxing of muscle groups	moderate practice required	minimum 8-10 min.	tension/ relaxation of muscle groups	moderate	none
Imagery	Creation of peaceful images, pictures or thoughts	easy to learn	5-10 min.	little activity required	high	high
Meditation	Deep contemplation	moderate to high practice	10 min.	little activity	little	none
Quieting Reflex	adjustment of body arousal level	easy to learn, much practice	6 sec.	little activity	little	none
Biofeedback	use of equipment to monitor level of relaxation response	moderate practice required	5 min.	dependent on type of relaxation used	moderate	possibly some

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